

### REMARKS

This amendment is submitted in response to the Examiner's Action dated October 18, 2005. Applicants have amended the claims to clarify a key feature of the invention, as recited by the claims. No new matter has been added, and the amendments place the claims in better condition for allowance. Applicants respectfully request entry of the amendments to the claims. The discussion/arguments provided below reference the claims in their amended form.

### IN THE SPECIFICATION

In the present Office Action, the disclosure is objected to because of informalities. Accordingly, Applicants have reviewed the specification and provided corrections thereto. The amendments overcome the informality, and Applicants respectfully request entry of the amendments to the specification and removal of the objections.

### IN THE DRAWINGS

In the present Office Action, the drawings are objected to for not matching the specification. Accordingly, Applicants have amended the specification to provide correct references to the drawings. The amendments to the specification overcome the present drawing objections. Applicants therefore respectfully request removal of the objections to the drawings.

### CLAIM REJECTIONS UNDER 35 U.S.C. § 103

In the present Office Action, Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rubin, et al.* (U.S. Patent No. 6,567,428) in view of *Kumaran, et al.* (U.S. Patent No. 6,775,233). Applicants' claimed invention is not unpatentable over the combination of *Rubin* and *Kumaran* because the combination does not suggest to one skilled in the art several features of Applicants' claimed invention.

Among the claimed features not suggested by the combination is the following:

*processing means for dynamically assigning a first percentage ...to said data traffic and a second percentage ... to said voice traffic, ...add up to at least 100 percent of the available spectral resources and ...dynamically adjustable depending on a presently determined need ... wherein further when the first and second percentages add up to more than 100 percent, an overlapping percentage of said spectral resources is dynamically allocated to a particular one of said*

voice traffic and said data traffic based on a cost factor analysis for voice and data traffic;

(Claim 1, et al.; emphases added)

Examiner correctly states that “Rubin fails to disclose ... allocation ... based on cost factor analysis.” *Rubin* also fails to disclose or suggest an overlapping percentage of spectral resources that is dynamically assigned. Examiner relies on *Kumaran* to support the rejection of the first feature not provided by *Rubin*, namely allocation based on a cost factor analysis. However, a careful reading of *Kumaran* and specifically those sections of *Kumaran* cited by Examiner indicated that *Kumaran* does not teach nor suggest this feature, as utilized within Applicants’ claims. Neither does *Kumaran* teach or suggest the second feature of dynamically assigning and overlapping percentage to one type of transmission (voice or data).

*Kumaran* (at col. 2, lines 21-25) merely describes a method for “scheduling of data transmission in a CDMA system... using a rate processor sharing approach” that “converts user Quality of Service (QoS) requirements for forward link data transmission into a rate and a corresponding violation probability, and then divides an available system resource such as transmission power among the users in accordance with the rates” (emphases added). The section further states that the “system resource may be divided among the users in a manner which satisfies a linear relationship involving the rates and corresponding cost factors of the users” (emphases added).

While *Kumaran* mentions the term “cost”, that reference is to “cost factors for the users,” where multiple users are being assigned a portion of available system resource for data transmission. *Kumaran* looks solely at allocating bandwidth for data transmission to different users, where any mention of cost is directly related to the cost factors of the users. *Kumaran* is devoid of any reference to “cost” as it refers to either data transmission versus voice transmission.

Nothing within this description of *Kumaran* addresses performing a cost analysis to determine when to allocate an overlapping percentage of the resource to voice versus data transmission. One skilled in the art recognizes that *Kumaran* does not suggest allocating bandwidth resources among voice versus data utilizing a cost determination for data versus voice

transmission. The combination, therefore, does not suggest this feature of Applicants' claimed invention.

Similarly, the combination of references does not suggest the following claimed feature:

*allocating a percentage of spectral resources within said overlapping windows to either voice or data depending on a predetermined priority for assigning the overlapped percentage, wherein when priority is assigned to data, the overlapped percentage is allocated to data and when priority is assigned to voice, the overlapped percentage is allocated to voice.*

(Claim 5, et al.; emphases added).

As stated above, neither of the references nor the combination of references suggest an overlap of assigned percentage to voice and data and then dynamically determine which service type (from voice or data) to allocate the overlapping percentage of bandwidth to. *Rubin* actually teaches that no (i.e., zero) space is allocated to data (signals) within a traffic frame when voice transmission is utilizing the space. That is, data is never assigned any percentage of the traffic when the frame is filled with voice. *Rubin* only transmits signaling packets within the traffic frame when there is "less-than-full-rate" voice packets and the multiplexer has signaling data to send (see col. 3, ll 3-17). *Kumaran* is devoid of any reference to voice transmission and/or overlapping percentages of allocation (voice and data).

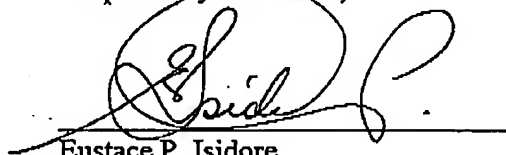
From the above discussion/arguments and the reasons provided therein, it is clear that one skilled in the art would not find the features of Applicants' invention to be suggested by the above combination of references. The above claims are therefore allowable over the combination.

CONCLUSION

Applicants have diligently responded to the Office Action by amending the specification to overcome an objection to the drawings and by amending the claims to clarify a key feature of the invention. Applicants have also provided arguments showing why the claims are allowable over the combination of references. The amendments overcome the drawing objections and the arguments overcomes the §103 rejection. Applicants, therefore, respectfully request reconsideration of the rejection and issuance of a Notice of Allowance for all claims now pending.

Applicants further request the Examiner contact the undersigned attorney of record at 512.343.6116 if such would further or expedite the prosecution of the present Application.

Respectfully submitted,



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